

### **AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A method for verifying a generated computer code having a first plurality of lines generated from a model file of a system comprising:

processing the model file to ~~determine~~ generate an expected computer code having a second plurality of lines based on from the model file, each line in the second plurality of lines corresponding to a line in the first plurality of lines;

comparing each line in the generated computer code to the expected computer code first plurality of lines and each corresponding line in the second plurality of lines to determine if the generated computer code and the expected computer code match; and

transmitting an error message if the generated computer code and the expected computer code do not match.

2. (Currently Amended) The method of claim 1 further, comprising the steps of:

comparing each ~~of the lines of line in the generated computer code to an expected form~~ first plurality of lines and each corresponding line in the second plurality of lines to verify each of the lines of the generated computer code is in a proper format ~~determine if the first plurality of lines does not include a line of code included in the second plurality of lines;~~ and

transmitting the error message if the ~~generated computer code is not in the proper format~~ first plurality of lines does not include the line of code included in the second plurality of lines.

3. (Currently Amended) The method of claim 1, further comprising the steps of:  
comparing each line in the generated computer code to the expected computer code first plurality of lines and each corresponding line in the second plurality of lines to determine if the ~~generated computer code~~ first plurality of lines includes any line of code not in the ~~expected computer code~~ second plurality of lines; and

transmitting the error message if the ~~generated computer code~~ first plurality of lines includes any line of code not in the ~~expected computer code~~ second plurality of lines.

4. (Currently Amended) The method of claim 1, further comprising the steps of:  
Comparing each line in the generated computer code to the expected computer code first plurality of lines and each corresponding line the second plurality of lines to determine if the first plurality of lines of the generated computer code are in a similar logical order as the second plurality of lines; and

transmitting the error message if the first plurality of lines of the generated computer code are not in the similar logical order.

5. (Currently Amended) The method of claim 1, further comprising the steps of:  
comparing a first header information section [[of]] in the first plurality of lines and generated computer code to an expected a second header information section in the second plurality of lines to determine if the first header information section of the generated computer code matches the ~~expected~~ second header information section; and

transmitting the error message if the first header information section of the generated computer code does not match the ~~expected~~ second header information section.

6. (Currently Amended) The method of claim 1, further comprising the steps of:
- comparing a ~~generated~~ first declared variable section ~~[[of]]~~ in the ~~generated computer code~~ first plurality of lines to ~~an expected~~ a second declared variable section ~~of an expected computer code~~ in the second plurality of lines to determine if the ~~generated~~ first declared ~~variables~~ variable section matches the ~~expected~~ second declared variable section; and
  - transmitting the error message if the ~~generated~~ first declared ~~variables~~ variable section does not match the ~~expected~~ second declared variable section.
7. (Currently Amended) A computer-readable storage medium containing a set of instructions for verifying a generated computer code having a first plurality of lines, the generated computer code automatically generated from a model file of a system, the set of instructions comprising:
- code that reads in the model file;
  - code that ~~determines~~ generates an expected computer code having a second plurality of lines based on from the model file, each line in the second plurality of lines corresponding with a line in the first plurality of lines;
  - code that reads in the generated computer code;
  - code that compares each line in the ~~generated computer code to the expected computer code~~ first plurality of lines and each corresponding line in the second plurality of lines to determine if the generated computer code and the expected computer code match; and
  - code that transmits an error message if the generated computer code and the expected computer code do not match.

8. (Currently Amended) The medium of claim 7, wherein the set of instructions further comprises:

code that compares each line in ~~[[of]]~~ the first plurality of lines ~~of the generated computer code to an expected form~~ and each corresponding line in the second plurality of lines; and

code that transmits the error message if the ~~generated computer code~~ first plurality of lines does not include all of the lines of the ~~expected computer code~~ second plurality of lines.

9. (Currently Amended) The medium of claim 7, wherein the set of instructions further comprises:

code that compares each line in the ~~generated computer code to the expected computer code~~ first plurality of lines and each corresponding line in the second plurality of lines to determine if the ~~generated computer code~~ first plurality of lines includes any line of code not in the ~~expected computer code~~ second plurality of lines; and

code that transmits the error message if the generated computer code includes any line of code not in the expected computer code.

10. (Currently Amended) The medium of claim 7, wherein the set of instructions further comprises:

code that compares each line in the ~~generated computer code to the expected computer code~~ first plurality of lines and each corresponding line in the second plurality of lines to determine if the first plurality of lines ~~of the generated computer code~~ are in a similar logical order as the second plurality of lines; and

code that transmits the error message if the first plurality of lines ~~of the generated computer code~~ are not in the similar logical order.

11. (Currently Amended) The medium of claim 7, wherein the set of instructions further comprises:

code that compares a first header information section ~~[[of]]~~ in the generated computer code to first plurality of lines and an expected a second header information section in the second plurality of lines to determine if the first header information section ~~of the generated computer code~~ matches the ~~expected~~ second header information section; and

code that transmits the error message if the first header information section ~~of the generated computer code~~ does not match the ~~expected~~ second header information section.

12. (Currently Amended) A system for verifying the contents of a generated computer code generated from a model file, comprising:

a processor operable to:

generate an expected computer code from the model file, each line of code in the expected computer code corresponding to a line of code in the generated computer code,

compare each line in the generated computer code with each corresponding line in the ~~[[an]]~~ expected computer code, and

transmit an error message if each line in the generated computer code and each corresponding line in the expected computer code do not match; and ~~[[,]] the expected computer code generated by the processor based on the model file; and~~

a display configured to display the error message, the display coupled to the processor.

13. (Currently Amended) The system of claim 12, wherein the error message indicates if each line in the generated computer code has all of the content of each corresponding line in the expected computer code.

14. (Currently Amended) The system of claim 12, wherein the error message indicates if each line of the generated computer code has any additional content not found in each corresponding line of the expected computer code.

15. (Currently Amended) The system of claim 12, wherein the processor is operable to compare each ~~of the lines of code in the generated computer code to an expected form~~ line in the first plurality of lines and each corresponding line in the second plurality of lines to determine if the first plurality of lines are in an expected form, and transmit the error message if each of the lines of code in the ~~generated computer code~~ first plurality of lines do not match the expected form.

16. (Currently Amended) The system of claim 12, wherein the processor is operable to compare ~~the generated computer code to the expected computer code~~ each line in the first plurality of lines and each corresponding line in the second plurality of lines to determine if the ~~generated computer code~~ first plurality of lines includes any line of code not in the ~~expected computer code~~ second plurality of lines, and transmit the error message if any lines of code in the ~~generated computer code~~ first plurality of lines is not in the ~~expected computer code~~ second plurality of lines.

17. (Currently Amended) The system of claim 12, wherein the processor is operable to compare ~~the generated computer code to the expected computer code~~ each line in the first plurality of lines and each corresponding line in the second plurality of lines to determine if ~~the lines of the generated computer code~~ each line in the first plurality of lines are in a logical order, and transmit the error message if ~~the lines of the generated computer code are~~ any line in the first plurality of lines is not in logical order.

18. (Currently Amended) The system of claim 12, wherein the processor is operable to compare a first header information section ~~of the generated computer code to an expected~~ in the first plurality of lines to a second header information section in the second plurality of lines to determine if the first header information section ~~of the generated computer code~~ matches the ~~expected~~ second header information section, and transmit the error message if the first header information section ~~of the generated computer code~~ does not match the ~~expected~~ second header information section.

19-20. (Canceled)

21. (Currently Amended) The method of claim 1, further comprising the steps of:  
comparing each line in the generated computer code to the expected computer code first plurality of lines and each corresponding line in the second plurality of lines to determine if the ~~generated computer code~~ first plurality of lines includes all of the lines of the ~~expected computer code~~ second plurality of lines; and  
transmitting an error message if the ~~generated computer code~~ first plurality of lines does not include all of the lines of the ~~expected computer code~~ second plurality of lines.

22. (Currently Amended) The medium of claim 7, wherein the set of instructions further comprises:

code that compares each line in the ~~generated computer code to the expected computer code~~ first plurality of lines and each corresponding line in the second plurality of lines to determine if the generated computer code includes all the lines of the expected computer code; and

code that transmits the error message if the ~~generated computer code~~ first plurality of lines does not include all of the lines of the ~~expected computer code~~ second plurality of lines.